

**STATE FOREST LAND
ENVIRONMENTAL CHECKLIST**

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.dnr.wa.gov> under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Timber Sale Name: Norwegian Wood FIT Sorts

Agreement #: 30-082492

2. Name of applicant: **Washington State Department of Natural Resources (DNR)**

3. Address and phone number of applicant and contact person:

**Ken McNamee
DNR Southeast Region
713 Bowers Road
Ellensburg, WA 98926
509-925-8510**

4. Date checklist prepared: **01/08/10**

5. Agency requesting checklist: **DNR**

6. Proposed timing or schedule (including phasing, if applicable):

- a. *Auction Date:* **Spring 2010**
b. *Planned contract end date (but may be extended):* **Fall 2010**
c. *Phasing:* **N/A**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Timber Sale

- a. *Site preparation:* **Site preparation will occur through mechanical ground disturbance during the course of ground-based yarding.**
b. *Regeneration Method:* **Sale area contains moderate to high levels of advanced regeneration, and on the average, the area will be fully stocked upon completion of harvest activities. Natural regeneration of lodgepole pine post-harvest is anticipated.**
c. *Vegetation Management:* **None**
d. *Thinning:* **None**

Roads: **None**

Rock Pits and/or Sale: **None**

Other: None

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☐ 303 (d) – listed water body in WAU: ☐ temp ☐ sediment ☐ completed TMDL (total maximum daily load):
☐ Landscape plan:
☐ Watershed analysis:
☐ Interdisciplinary team (ID Team) report:
☒ Road design plan:
☒ Wildlife report:
☐ Geotechnical report:
☒ Other specialist report(s): Archaeologist
☐ Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):
☐ Rock pit plan:
☒ Other: Information was gathered from the State Soil Survey, Policy for Sustainable Forests adopted 2006 & DNR Habitat Conservation Plan (HCP), adopted January 30, 1997, GIS maps that display water types, rain on snow areas, and areas of potential mass wasting and erosion; Planning and Tracking reports.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. **Yes-Forest Practice Application**

10. List any government approvals or permits that will be needed for your proposal, if known.

☐ HPA ☐ Burning permit ☐ Shoreline permit ☒ Incidental take permit ☒ FPA ☒ Other RMAP #270086L

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. *Complete proposal description:*

This is a "Forest Improvement Treatment" Timber Sale known as Norwegian Wood FIT Timber Sale. All units will be thinned using operator select cutting prescriptions with defined trees per acre (tpa) to be left following the operation. Equipment operators will need to be "certified" by DNR personnel prior to cutting to make sure that the prescription is understood.

The Norwegian Wood FIT Timber Sale includes seven units encompassing 458 acres. The original proposal included approximately 680 acres, but was reduced to 458 acres after removing talus outcroppings, small springs, stream buffers and steep inoperable areas. Acreages by unit are: Unit #1 (220 acres), Unit #2 (43 acres), Unit #3 (87 acres), Unit #4 (23 acres), Unit #5 (4 acres), Unit #6 (47 acres), and Unit #7 (34 acres). The sale area is located in the upper portion of the Diamond Fork, Klickitat River drainage west of Yakima in Township 11 North, Range 12 East W. M. and Township 11 North, Range 13 East W. M. Primary access to the sale area is available from the Ahtanum Middle Fork road system.

The objective of this timber harvest is to remove dead and dying lodgepole pine, grand fir, Engelmann spruce and sub-alpine fir to reduce the threat of a catastrophic wildfire. This timber harvest will reduce fuel loading and allow for establishment of new regeneration. Large diameter western larch, ponderosa pine and Douglas fir will be retained throughout. A commercial uneven-aged management harvest is proposed for the units in this timber sale. Trees to be removed will be in the mid-size diameter classes (from 10" to 24" dbh). Thickets of younger trees (<8" dbh) will be left intact when possible as well as all larger diameter (>28" dbh) western larch, ponderosa pine and Douglas fir will be retained. Objectives of this timber sale will be accomplished through operator select cutting prescriptions with specific leave tree requirements for all units. All of the units have a maximum cut diameter for each species with species preference guidelines. After the thinning operation, there will be an average stocking level of a minimum of 8 trees per acre (tpa) greater than 10" dbh in all units across the landscape. In addition, approximately 75-90 tpa less than 10" dbh will remain post-harvest. One exception to this prescription is Unit #2, a majority of Unit #6 and all of Unit #5, where stand conditions currently meet dispersal habitat criterion. In these areas, dispersal habitat will be retained post-harvest with a minimum 40 tpa greater than 11" dbh and 60 feet tall, and a canopy closure of 50%.

b. *Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.*

A prominent feature of this area is the presence of large remnant old growth larch, ponderosa pine and Douglas fir primarily found in Units #1, #2, #6 and #7. The primary timber species currently found in all units are lodgepole pine, subalpine fir, mountain hemlock and western larch. Secondary species found in these units include grand fir, Engelmann spruce, Douglas fir, western white pine, white bark pine, yellow cedar and ponderosa pine. The "average" age of these stands is 60 to 110 years old with scattered remnant trees that are between 200 and 600 years old. No western larch, Douglas fir or ponderosa pine >160 years of age and 28" dbh or larger will be harvested. In addition, no whitebark pine will be harvested unless it is located within right-of-way clearing limits and/or landing areas.

Throughout the entire proposal area, the subalpine fir series (ABLA2) predominates in both lower and upper elevation ranges. The only exception is the northern aspects in Unit #1 that contain the mountain hemlock (TSME) series and the mountain hemlock/Cascades azalea-big huckleberry (TSME/RHAL-VAME: CMS356) plant association. In the upper ranges of the proposal area, subalpine fir/Cascade azalea is the predominant association (ABLA2/RHAL: CES211), while the subalpine fir/broadleaf arnica-skunkleaf polemonium plant association is most prevalent in the lower elevations (ABLA2/ARLA-POPU: CEF424). All plant association information is from the "Field Guide for Forested Plant Associations of the Wenatchee National Forest" (USFS General Technical Report PNW-GTR 359).

A commercial uneven-aged management harvest is proposed for the units in this timber sale. A harvest prescription has been developed for each unit with species preference, maximum cut size by species with disease and/or insect problems taken into consideration. Factors used to develop unit prescriptions include tree size, species composition, current stocking levels, disease or insect problems, and mortality. Units #2, #5 and portions of Unit #6 will remain in NSO dispersal habitat post-harvest.

The objective of this harvest will be to reduce the risk of catastrophic wildfire and capture mortality from disease and/or insect outbreaks in the sale area. Due to an ongoing mountain pine bark beetle attack in the lodgepole pine component, designated northern spotted owl dispersal habitat stands have fallen out of habitat status. The aforementioned exception is in Units #2, #5 and Unit #6, where portions of this stand currently meet dispersal habitat

criterion, and thus, will remain in dispersal habitat post-harvest. The proposed timber harvest will reduce fuel loading and create ground disturbance that will allow for establishment of natural regeneration. Over time, these stands will achieve dispersal habitat status once again with the retention of remnant old growth components.

c. Road activity summary. See also forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		17,365	8	0
Reconstruction		0		0
Abandonment		17,365	8	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0
Culvert Install/Replace (no fish)	5			

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See timber sale map available at DNR region office, and/or color landscape/WAU map on the DNR website <http://www.dnr.wa.gov> under "SEPA Center.")

a. Legal description: Parts of Section 12, Township 11 North, Range 12 East, W. M., and parts of Sections 4, 6 and 8, Township 11 North, Range 13 East, W. M., Yakima County.

b. Distance and direction from nearest town (include road names):

All units are located approximately 42.2 miles by road west of Yakima. From Yakima (I-82), proceed west on the Ahtanum county road approximately 19.8 miles to the town of Tampico; then northwest on the North Fork Ahtanum Creek County Road approximately 9.4 miles to the DNR guard station at the end of the pavement; then approximately 5.5 miles west on the A-2000 Road to Tree Phones campground; then approximately 7.5 miles south west on the A-2800 Road.

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website <http://www.dnr.wa.gov> under "SEPA Center.")

WAU Name	WAU Acres	Proposal Acres
KLICKITAT MEADOWS	28,636	458

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website <http://www.dnr.wa.gov> under "SEPA Center" for a broader landscape perspective.)

This proposal is located within the Klickitat Meadows WAU (#300102), of which the DNR owns 25% (7115 acres out of a total of 28,637 acres). According to the DNR's GIS Forest Practice Application database as of December 12, 2009, Forest Practice Applications have been approved for the following activities within this WAU on both public and privately owned lands within the last 7 years: 2,241 acres of even-age harvest; 1,833 acres of uneven-age harvest. Combined, this represents 14.2% of the total acreage within this WAU. This proposal will add an additional 458 acres of uneven-age harvest in the Klickitat Meadows WAU, bringing the total amount of harvested acres to 4,532. This additional acreage represents 1.6% of the total WAU, and 6.4% of the DNR ownership.

The timber stands described in this proposal will be managed for commercial thinning and/or sanitation harvests every 60 to 80 years barring unforeseen conditions such as catastrophic fire or forest health epidemics.

This sale is part of a broader effort to address forest health problems on state trust lands primarily in the Klickitat Meadows WAU, with smaller areas of the S. Fork Ahtanum WAU and S. Fork Tieton River WAU included. These higher elevation forest types (generally over 4,500 ft.) that contain lodgepole pine have been subject to widespread mountain pine beetle attack, resulting in high levels of mortality. Many of the stands no longer meet dispersal habitat criterion due primarily to loss of canopy closure and are at risk for large stand replacement fires as demonstrated by the Discovery Fire in August 2009.

Approximately 2 Forest Improvement Treatment (FIT) sales totaling approximately 1,000 acres will be carried out over the next two years within an area of checkerboard ownership approximately 20 square miles in size, commonly known as Klickitat Meadows. These will be made up of a combination of dispersal thinnings, with at least 40 tpa >11" dbh and at least 50% canopy post-harvest, and heavier thinnings in areas that are no longer dispersal habitat. In all cases the larger remnant western larch, Douglas-fir and ponderosa pine will be left and will be more resistant to fire due to the thinning of the denser, fire-susceptible trees around them. Additionally, these treatments will help prevent catastrophic stand replacement fires, which have plagued the western states over the past 15 years.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐ Flat, ☐ Rolling, ☒ Hilly, ☐ Steep Slopes, ☐ Mountainous, ☐ Other:

- 1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone). All units are located in the upper reaches of the Diamond Fork, Klickitat River drainage. Elevations range from approximately 5,800 feet to 4,680 feet. The project area is relatively dry from late spring through fall. Most moisture is available from the winter snow pack, which can average 5 to 6 feet in a typical winter. All units are in the subalpine fir/mountain hemlock vegetation zones.
- 2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s). There are no significant changes between the proposal location and the general description of the WAU or sub-basin.

- b. What is the steepest slope on the site (approximate percent slope)?
The steepest slope on the project area is approximately 45% to accommodate ground based skidding. These steepest slopes comprise less than 10% of the total sale area.
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.*

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
7193	SAYDAB	0-5%	55	NO DATA	LOW
5249	NAXING	25-45%	104	LOW	MEDIUM
5248	NAXING	5-25%	250	INSIGNIFICANT	LOW
0155	AQUIC CRYANDEPTS	0-3%	46	NO DATA	LOW
5250	NAXING	45-65%	3	MEDIUM	HIGH

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
- 1) *Surface indications:*
There were no indications of unstable slopes in the sale area or in the immediate vicinity. This is consistent with the fact that slopes throughout the sale area are gentle to moderate.
 - 2) *Is there evidence of natural slope failures in the sub-basin(s)?*
☒ No ☐ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:
 - 3) *Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?*
☒ No ☐ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:
Associated management activity:
 - 4) *Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?*
☒ No ☐ Yes, describe similarities between the conditions and activities on these sites:
 - 5) *Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*
N/A
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads: 8 Approx. acreage new landings: 8 Fill source: N/A
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
There will be minimal erosion occurring as a result of this timber sale. However, erosion control measures as described in item B.1.h below will be used to further reduce the threat of sediment delivery to streams.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*
None
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)
Water bars and/or drain dips will be installed on roads and steeper skid trails as appropriate following the logging operation to reduce the threat of erosion and potential delivery to streams. In addition, blocked off roads will be slashed and cut banks will be grass seeded with certified weed free seed following harvest operations. Several roads will be blocked off post harvest to limit rutting and potential sediment delivery. Skidding and hauling will be closely monitored and suspended as necessary to prevent rutting and potential sediment delivery during harvest operations.

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.
Exhaust emissions from equipment (log trucks, crew vehicles, and harvesting/skidding equipment) can be expected for the duration of the project from late June until the end of November. If necessary, dust abatement may be used at the discretion of the contract administrator. Slash piles may be burned.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
None
- c. Proposed measures to reduce or control emissions or other impacts to air, if any:
Any slash burning will be done following DNR Smoke Management Rules and the Yakima Clean Air Authority.

3. Water

- a. Surface:
- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See timber sale map available at DNR region office, or forest practice application base maps.)*
 - a) *Downstream water bodies:*

Stream flow from all units flows into the Diamond Fork of the Klickitat River that eventually flows into the Columbia River.

b) Complete the following riparian & wetland management zone table: N/A

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)

c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.
The unit boundaries are a minimum of 100' from either side of Type F streams and 50' from either side of Type Np streams up to the point where it leaves DNR ownership or harvest boundaries. No management or harvest will occur within these buffers. The 100' and 50' no cut buffers along the Type F and Type Np stream are delineated with white "TIMBER HARVEST BOUNDARY" tags with flashers and red flagging. A minimum 30' Equipment Limitation Zone (ELZ) has been established on either side of the Type Ns streams. ELZ's are delineated with blue "SPECIAL MANAGEMENT ZONE" tags with flashers and/or blue flagging.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐ No ☒ Yes (See RMZ/WMZ table above and timber sale map available at DNR region office.)
Description (include culverts):
Equipment will not be allowed within 30' of Type Ns streams on either side with the exception of designated crossings.
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
None
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)
☒ No ☐ Yes, description:
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒ No ☐ Yes, describe location:
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒ No ☐ Yes, type and volume:
- 7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?
N/A
- 8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?
☒ No ☐ Yes, describe changes and possible causes:
- 9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
☒ No ☐ Yes, explain:
- 10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?
There are approximately 2.6 road miles per square mile in the Klickitat Meadows WAU.

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☒ No ☐ Yes, describe:
- 11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, **STOP HERE** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.
☒ No ☐ Yes, approximate percent of WAU in significant ROS zone.
Approximate percent of sub-basin(s):
- 12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?
N/A
- 13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
☒ No ☐ Yes, describe observations:
- 14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.
N/A
- 15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?
☒ No ☐ Yes, possible impacts:
- 16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.
None

b. Ground Water:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.
No
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
None
- 3) *Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?*
☒ *No* ☐ *Yes, describe:*

a) *Note protection measures, if any.*
N/A

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
None
- 2) Could waste materials enter ground or surface waters? If so, generally describe.
No
- a) *Note protection measures, if any.*
N/A

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)
Installation of water bars, drain dips and grass seeding as described in the water section above, as well as B.1.h., will reduce potential runoff on roads within the project area.

4. Plants

a. Check or circle types of vegetation found on the site:

- ☒ deciduous tree: ☐ alder, ☐ maple, ☒ aspen, ☐ cottonwood, ☒ western larch, ☐ birch, ☐ other:
☒ evergreen tree: ☒ Douglas fir, ☒ grand fir, ☐ Pacific silver fir, ☒ ponderosa pine, ☒ lodgepole pine,
☐ western hemlock, ☒ mountain hemlock, ☒ Englemann spruce, ☐ Sitka spruce,
☐ red cedar, ☒ yellow cedar, ☐ other:
☒ shrubs: ☒ huckleberry, ☐ salmonberry, ☐ salal, ☐ other:
☒ grass
☐ pasture
☐ crop or grain
☐ wet soil plants: ☐ cattail, ☐ buttercup, ☐ bullrush, ☐ skunk cabbage, ☐ devil's club, ☐ other:
☐ water plants: ☐ water lily, ☐ eelgrass, ☐ milfoil, ☐ other:
☐ other types of vegetation:
☐ plant communities of concern:

b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)

Approximately 7,935 Mbf (or 51,583 tons) of conifer trees will be harvested from the sale area. Species to be removed include grand fir, sub-alpine fir, Engelmann spruce, Douglas-fir, western larch, green and dead lodgepole pine.

- 1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: <http://www.dnr.wa.gov> under "SEPA Center.")

Stands directly adjacent to the sale area are very similar in species composition to that which is found in the sale area. Age of the adjacent stands varies with ownership. Private ownerships are generally in the younger age classes (5 to 20 years old). DNR ownership is approximately 80 to 120 years old with some scattered remnant trees 200-600+ years old. Structural diversity is much more prevalent on DNR ownerships.
- 2) Retention tree plan:

In general, the retention tree plan for this timber sale calls for an un-even aged mosaic of young conifer clumps mixed with a scattered large overstory. Harvest prescriptions will target median DBH classes. After the thinning operation, there will be a minimum stocking level of 8 tpa greater than 10" dbh in all units across the landscape, with the exception of Units #2, #5 and Unit #6, where portions that are currently in dispersal habitat will remain in habitat post-harvest with a minimum of 40 tpa. In addition, approximately 2 snags per acre will be retained along with approximately 75-90 tpa less than 10" dbh, and all Douglas-fir, western larch and ponderosa pine greater than 28" dbh and 160 years old will be retained.

c. List threatened or endangered *plant* species known to be on or near the site.
None known.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
None

5. Animal

- a. Circle or check any birds animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site:
- birds: ☒hawk, ☐heron, ☐eagle, ☒songbirds, ☐pigeon, ☐other:
mammals: ☒deer, ☒bear, ☒elk, ☐beaver, ☒other: Cougar.
fish: ☐bass, ☐salmon, ☒trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☒talus slopes, ☐caves, ☒cliffs, ☐oak woodlands, ☐balds, ☐mineral springs
- b. List any threatened or endangered species known to be on or near the site (*include federal- and state-listed species*).
None known.
- c. Is the site part of a migration route? If so, explain.
☒Pacific flyway ☒Other migration route: **Elk** *Explain if any boxes checked:*
- d. Proposed measures to preserve or enhance wildlife, if any:

1) *Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.*

Species /Habitat: **Spotted Owl/Dispersal** Protection Measures: **Due to an infestation of the mountain pine bark beetle in the lodgepole pine, the stands have gone from dispersal habitat to non-habitat on designated lands with the exception of Units #2, #5 and Unit #6 where portions of these units currently meet dispersal habitat criterion. Harvesting the stands will reduce fuel loading and create ground disturbance, promoting natural regeneration and ultimately producing dispersal habitat once again with a remnant old growth component.**

Species /Habitat: **Mammals & Invertebrates/Riparian Areas** Protection Measures: **There will be no harvest within Type F or Np riparian areas and equipment will not be allowed to operate within Type Ns ELZ's other than designated crossings.**

Species /Habitat: **Multiple Species/Upland & Riparian** Protection Measures: **WRT's & GRT's will be left scattered throughout the units. On habitat units a minimum of 40 tpa 11 inches or greater will be left. Some areas of the original proposal were deleted from the harvest boundaries and will be left in their current state to maintain habitat diversity in the area.**

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
None
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
None

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.
There is the possibility of oil and/or diesel spills occurring on the site. If a spill does occur, the contractor will be required to notify the contract administrator for the DNR and initiate appropriate clean up measures. The contract administrator and other agency personnel will inspect the site if necessary to make sure that clean up work has been completed satisfactorily.
- 1) Describe special emergency services that might be required.
None
- 2) Proposed measures to reduce or control environmental health hazards, if any:
None
- b. Noise
- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
Possible noise sources include recreational traffic and other logging operations in the area. These noise sources will not affect the project.
- 2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.
Noise from contractor's vehicles, harvesting equipment, skidders and log trucks will be associated with this project. Generally, that noise would occur during daylight to approximately 5:00 pm. However, operations may commence much earlier if "hoot owl" restrictions are placed upon the contractor during the fire season. There is a possibility that contractors may operate on weekends as well.
- 3) Proposed measures to reduce or control noise impacts, if any:
Operation will occur in a remote area, so noise impact should not be a problem.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? (*Site includes the complete proposal, e.g. rock pits and access roads.*)
The site is managed for multiple use activities consistent with DNR principles for state trust lands. This includes an emphasis on timber with consideration given to other amenities including recreation and wildlife habitat. Adjacent government ownerships have a similar mandate. However, more emphasis is placed on enhancement of wildlife habitat. Industrial timber companies own most adjacent private ground with emphasis on maximizing timber production and revenue.
- b. Has the site been used for agriculture? If so, describe. **Grazing (Permit Range #11-A66368).**
- c. Describe any structures on the site. **None known.**
- d. Will any structures be demolished? If so, what? **No**
- e. What is the current zoning classification of the site? **Commercial Forest**
- f. What is the current comprehensive plan designation of the site? **Commercial Forest**
- g. If applicable, what is the current shoreline master program designation of the site? **N/A**
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify. **No**
- i. Approximately how many people would reside or work in the completed project? **None**
- j. Approximately how many people would the completed project displace? **None**
- k. Proposed measures to avoid or reduce displacement impacts, if any: **None**
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **None**

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None
- c. Proposed measures to reduce or control housing impacts, if any:
None

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?
N/A
- b. What views in the immediate vicinity would be altered or obstructed? **N/A**
 - 1) *Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?*
☒ **No** ☐ **Yes, viewing location:**
 - 2) *Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?*
☒ **No** ☐ **Yes, scenic corridor name:**
 - 3) *How will this proposal affect any views described in 1) or 2) above?*
N/A
- c. Proposed measures to reduce or control aesthetic impacts, if any:
None

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? **None**
- b. Could light or glare from the finished project be a safety hazard or interfere with views? **No**
- c. What existing off-site sources of light or glare may affect your proposal? **None**
- d. Proposed measures to reduce or control light and glare impacts, if any: **None**

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?
Most recreational opportunities in the project area are informal, dispersed recreation. These opportunities include hunting, camping, hiking, horseback riding and snowmobile riding. There are gates located on both primary access roads that are controlled by a private landowner. In the past, entry into this area for recreation has been by permission only.

- b. Would the proposed project displace any existing recreational uses? If so, describe:
The proposed project may temporarily displace campers and horseback riders in the spring and summer months of 2010. However, those impacts should be minimal and only in those areas where active logging operations are in progress.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe. **None known.**
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
Aspen arborglyphs are ubiquitous to the Klickitat Meadows area marking the visits of past sheep herders. Several arborglyphs dating back to 1916-1919 were observed in and around the sale area with some dating as recent as the 1970's possibly made by loggers or hunters. These are found in aspen groves and no aspen will be removed with this harvest.
- c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)
A professional archaeologist will survey the proposal area prior to timber harvest. Should any cultural resources be identified within the sale boundaries from the survey or during the timber harvest, work will cease in that area and a professional archaeologist will be notified immediately and a site protection plan will be developed.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.
Diamond Fork, Klickitat River (DNR Road Number A-2800) and Middle Fork Ahtanum Creek (DNR Road Number A-2000) Roads provide access to the project area under DNR jurisdiction. The Ahtanum County road is under Yakima County jurisdiction.
 - 1) *Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?*
No
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
No
- c. How many parking spaces would the completed project have? How many would the project eliminate?
None
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
New road construction will be necessary to access some units. These new roads will be minimal standard roads used to access the site and provide a haul route for the logging operation.
 - 1) *How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?*
New roads will be blocked and restricted to official use only after logging operations are completed. They will provide access for future management activities and fire control as necessary.
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
None
- g. Proposed measures to reduce or control transportation impacts, if any:
None

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.
No
- b. Proposed measures to reduce or control direct impacts on public services, if any.
None


16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
None
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
None

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Proposed by:


BRIAN MIZE, District Forester

Date: 1/14/10

Reviewed by:


KEN McNAMEE, District Manager

14 Jan 10
Date:

Approved by:


GEORGE B. SHELTON, Assistant Region Manager

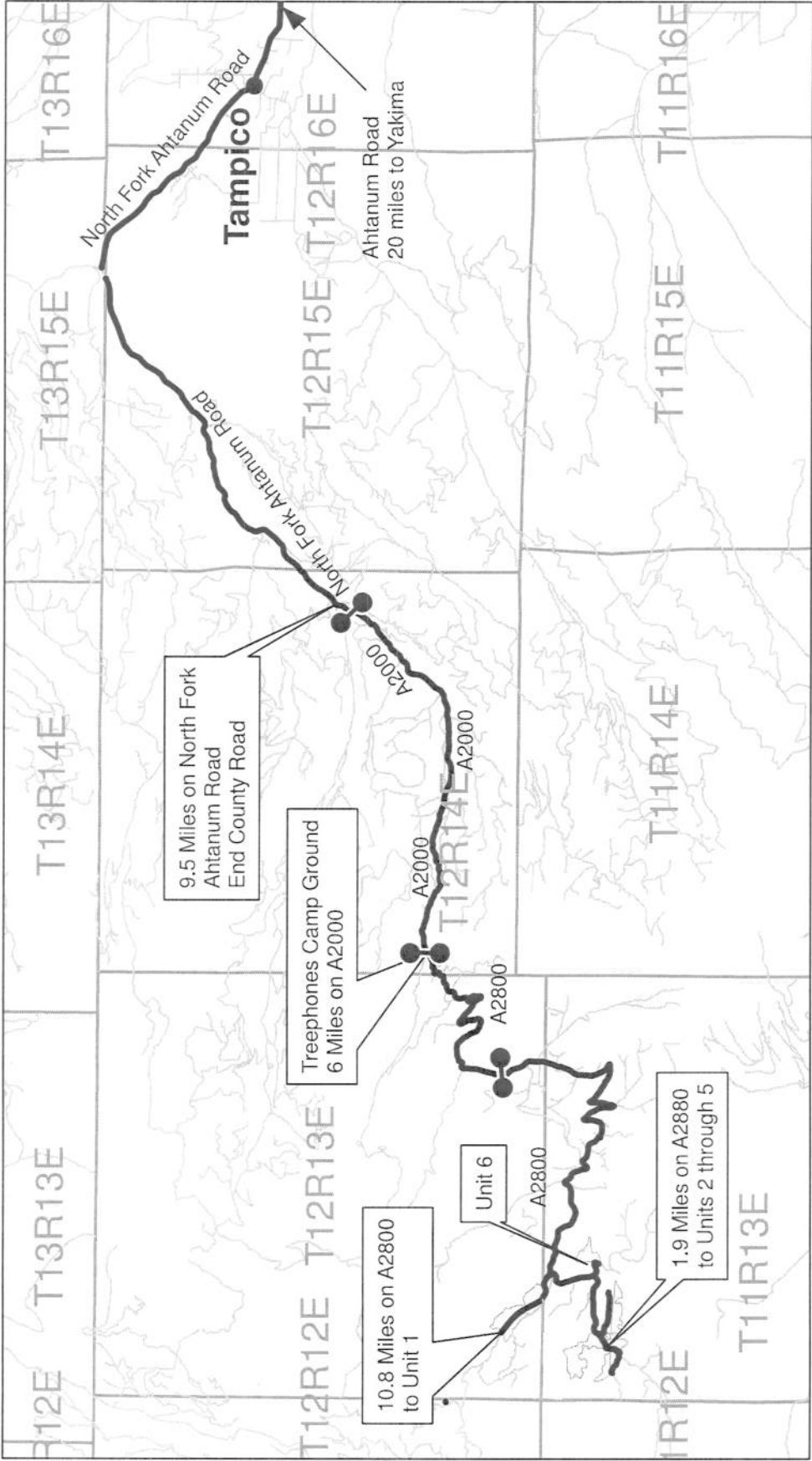
1/14/10
Date:

TIMBER SALE VICINITY MAP

December 12, 2008

SALE NAME: Norwegian Wood FIT Sorts
AGREEMENT NO: 30-082492
TRUST: Common School (03)

REGION: Southeast
COUNTY: Yakima



Haul Route

Sale Area

Gate

Heading west from Tampico, go 9.5 miles on the North Fork Ahtanum Road. Transition to the A2000 and travel west for 6 miles to the A2800. Drive on the A2800 for 9.7 miles to the junction with the A2880. Continue on the A2800 for 1.1 miles to the end of Unit 1 or turn south for 1.9 miles onto the A2880 to the start of Units 1 through Unit 5. Turn east after one mile on the A2880 road onto the A2883 and travel for .8 miles to the start of Unit 6.

0 2 4 Miles

1 inch equals 11,333 feet

